CSIS | AUGUST 2014

CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

A Report of the CSIS Project on Prosperity and Development

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Building Networks of Diplomatic Cooperation

Opportunities for U.S.-Venezuela Science Cooperation

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Introduction

The United States currently maintains formal diplomatic relations with all but five United Nations member-states.¹ In addition to these five countries, there are states including Venezuela—with which U.S. relations continue to be strained. In most such relationships, cooperation across societies is challenging, hampered by seemingly insurmountable political differences between governments. When official cooperation at the higher levels of government proves infeasible, it is often in the interest of both countries to pursue alternative, more informal approaches, sometimes referred to as "Track II diplomacy." Such forms of diplomacy allow for exchanges of people and ideas to build confidence between the two sides. Ideally, the modest gains in trust from Track II diplomacy will translate into a broader opening for political rapprochement.

A notable form of Track II approaches is science diplomacy, which has been an effective component of the U.S. government's diplomatic toolkit since the Cold War. The American Association for the Advancement of Science (AAAS), which has been an integral partner for CSIS in this project, delineates science diplomacy into three categories: "science in diplomacy," "diplomacy for science," and "science for diplomacy."² This project focuses on the latter understanding of "science for diplomacy," namely that cooperation around science can improve diplomatic relations between two (or more) countries.

One of the most prominent American proponents of deepening science diplomacy is the Richard Lounsbery Foundation, which has in the past pursued similar science-based cooperation initiatives with respect to Iran, Cuba, and North Korea. CSIS has been one of the partners working with the Lounsbery Foundation on science diplomacy, and in August 2012, the CSIS Americas Program published a report on the prospects for U.S.-Cuba academic and science-based exchanges, exploring science diplomacy in the context of an essentially nonexistent diplomatic relationship.³

This report thus builds on previous efforts by the Lounsbery Foundation and its partners, including the CSIS Americas Program, to pursue avenues for science diplomacy between the United States and countries with which it has a complicated relationship. This initiative is also part of the CSIS Project on Prosperity and Development's ongoing work on finding alternatives in the U.S. government's approach to countries with which the bilateral relationship should reflect cooperation beyond traditional assistance.

This report is the product of a year-long project to connect Venezuelan and American scientists and institutions with one another. In addition to many interviews with regional and science policy experts, the project involved a CSIS research trip to Venezuela as well as a conference in Washington, D.C., that brought together American and Venezuelan scientists and science policy officials for an off-the-record discussion to identify concrete opportunities for cooperation.

¹ Bhutan, Cuba, Iran, North Korea, and Syria.

² AAAS, "Information for Authors," *Science & Diplomacy*, 2013, http://www.sciencediplomacy.org/author-info.

³ Stephen Johnson, *U.S.-Cuba Academic and Science-Based Exchanges* (Washington, DC: CSIS, August 2012), http://csis.org/files/publication/120821_Johnson_U.S.-CubaExchanges_Web.pdf.

Background

The United States and Venezuela both possess rich and broad scientific legacies; initial attempts to foster science diplomacy between the countries, however, can be effective only if they focus on a limited set of jointly predetermined areas of science. These focus areas should ideally represent fields not only of strength for both countries' science communities, but also fields in which each side offers comparative advantages. Through conversations with its partner organizations, CSIS was able to narrow down its initial list of potential areas of cooperation to two fields: biodiversity and seismology. In terms of the former, Venezuela is one of the most biodiverse countries in the world. Venezuela also experiences its fair share of earthquakes, and as a result, has developed a reputable seismological research capacity. The topics of biodiversity and seismology are likewise of high importance to the American science community, with the United States and Venezuela sharing many of the same challenges in these areas. Given that these particular scientific topics are rarely (if ever) politicized, they were identified as ideal points around which to connect the American and Venezuelan scientific communities, with the ultimate goal of establishing a more permanent and official mechanism for exchange between the two societies.

In October 2012, CSIS researchers visited Caracas and met with scientists from prominent Venezuelan scientific institutions, including the Simón Bolívar University (USB), the Central University of Venezuela (UCV), the Venezuelan Institute for Scientific Research (IVIC), and the Venezuelan Foundation for Seismological Research (FUNVISIS).⁴ Of these, the former two are major public universities whereas the latter two are government-affiliated research institutes. In Caracas, the CSIS team also met separately with officials at the U.S. Embassy in order to learn about the U.S. government's position on this issue. The embassy personnel expressed favorability toward deeper science relations between the two countries but also pointed out, correctly, that any U.S.-backed initiatives in Venezuela must maintain a low profile, at least in the current atmosphere.

The research trip itself was preceded by extensive dialogue between CSIS and government and nongovernment science cooperation experts in the United States. In addition to AAAS, the authors also consulted representatives from the National Academy of Sciences, the U.S. State Department, the U.S. Agency for International Development (USAID), and the Smithsonian Institution, among other organizations. These partners drew upon their own experiences with cross-country science cooperation in Latin America to help CSIS identify the right interlocutors in Venezuela.

Science Diplomacy

Science diplomacy ultimately brings together actors from different countries to collaborate on issues that are apolitical and that transcend national borders. Such cooperative arrangements are necessary because problems such as natural disasters, endemic diseases, and invasive species are regional (and sometimes global) and can only be combated in tandem by all affected parties. To take unilateral action on such problems is tantamount to addressing their symptoms, not their causes.

 $^{^4}$ To maintain confidentiality and ensure open discussion, all interviews were conducted on a not-for-attribution basis.

Civilian scientist exchanges between the United States and the Soviet Union, for example, were one of the earliest forms of cooperation between the two superpowers during the Cold War. Since the collapse of the Soviet Union, U.S.-Russian science cooperation has continued, particularly in the area of health; the oral polio vaccine, after all, was the product of collaboration between Albert Sabin and Soviet researchers. Since then, U.S. institutions have on multiple occasions engaged with foreign counterparts (such as Iranian ones) on science-based cooperative initiatives, even when traditional diplomatic options are restricted or nonexistent.

Science Diplomacy and the U.S. Government

Although most governments have not integrated science into foreign policy in the past, due to a growing awareness for international collaboration and science diplomacy, the U.S. Congress formally requested the establishment of a science and technology adviser to the secretary of state in 2000.⁵ Science diplomacy is increasingly important to the State Department because the U.S. government's view on international collaboration has changed dramatically. Today, international collaboration is seen as the norm, and by many, as a necessity; in fact, USAID spends around \$200 million per year globally on biodiversity alone.⁶ There is genuine desire among countries to work together around transnational issues, such as avian flu, proliferation, and biodiversity.

It is also important to look to scientists for guidance because they are effective at providing assistance, especially in crisis and post-crisis situations. Their ability to think through solutions can have consequences for arenas outside their specific fields of research. For example, advances in health (such as through immunization) have broader economic consequences for nations because they mitigate the impact of epidemics on the global workforce.⁷

U.S.-Venezuela Relations in the Chávez Era

Today's complicated relationship between the United States and Venezuela can be traced to Hugo Chávez's rise to the presidency of Venezuela in 1998. Bilateral ties with the United States were impaired by Chávez's frequent outbursts against the U.S. government, including accusations that it fomented the anti-Chávez coup in 2002 and even that it may have somehow been "responsible" for his cancer.⁸ In addition to his virulently anti-American rhetoric, Chávez cultivated close ties with a series of U.S. rivals, including Cuba, Russia, and Iran.⁹ With Fidel Castro, Chávez established the Bolivarian Alliance for the Peoples of Our America (ALBA), a coalition of Latin American and Caribbean countries formed to counter U.S. influence in the region; ALBA has since grown to include Bolivia, Nicaragua, and Ecuador as well.

⁵ U.S. Department of State, "Office of the Science & Technology Adviser," http://www.state.gov/e/stas.

⁶ According to a senior State Department official involved with science diplomacy. ⁷ Interview with Venezuelan scientist in Washington, DC, June 2013.

⁸ CNN Wire Staff, "Chavez: Is U.S. behind spate of cancer among Latin American leaders?," CNN, December 29, 2011, http://www.cnn.com/2011/12/28/world/americas/venezuela-chavez-accusations/index.html. ⁹ One interlocutor for this project suggested that while science-based agreements between Venezuela and countries such as Iran and Belarus exist on paper, practically speaking, they do not amount to much actual scientific cooperation.

The economic relationship has been a different story altogether, as the United States remains one of Venezuela's most important trade partners. While oil accounts for 90 percent of all Venezuelan exports, 40 percent of those exports are to the United States,¹⁰ which in turn exports machines, cars, and gas to Venezuela. In the context of this report on science-based cooperation, these economic indicators are relevant in that they speak to a powerful precedent for U.S.-Venezuela ties beyond the official political level.

The CSIS visit to Caracas also took place less than five months before the death of Hugo Chávez, offering what might have been a last glimpse into the Venezuela of Chávez. Much was made of what the post-Chávez transition would mean for Venezuela, and whether his hand-picked successor Nicolás Maduro would seek to maintain the status quo, or even be able to. Notably, the transition has been seen by many in the policy community as a unique opportunity to restore U.S.-Venezuela relations.

Maduro, however, has for the most part continued his predecessor's policies, no doubt feeling the pressure of maintaining Chávez's legacy in order to placate hardliners within the regime. Bilateral relations between the United States and Venezuela have not improved under Maduro, with both sides expelling three of the other's diplomats from their respective embassies in late September/early October 2013.¹¹ The situation has remained similarly tense with respect to science in Venezuela, with some scientists interviewed over the course of this project being of the belief that conditions have actually become more extreme for them since Maduro assumed office.¹²

Challenges to Science in Venezuela

The CSIS research trip to Venezuela also took place just weeks after the disputed presidential elections of October 7, 2012, that saw Hugo Chávez narrowly retain the presidency, holding off challenger Henrique Capriles in controversial fashion. That election further solidified the divisions among Venezuelans that had been forming over the course of the Chávez regime and earlier, essentially leaving Venezuelan society split down the middle, with most Venezuelans in opposite poles of support and disdain for Chávez. This division has also manifested itself through its effects on the science community of Venezuela, where the government views science as a political object rather than a matter to be left to academics.

The politicization of science by the Venezuelan government is immediately perceivable in the condition of the public universities compared to that of the government-affiliated research institutions. The two major universities visited as part of this project showed obvious signs of underfunding, with outdated technology, dilapidated facilities, and low morale among faculty members, who seemed embarrassed by the state of their campuses. The government-affiliated institutions, in contrast, were equipped with modern amenities and staffed by scientists much more inclined to the present government; it was also clear that these scientists had access to the resources (beyond just finances) necessary for conducting cutting-edge research in Venezuela. In any case, both sets of scientists expressed enthusiasm for opening collaboration (or furthering existing ties) with their American counterparts.

 ¹⁰ It is suggested that the United States may soon dramatically reduce its need for Venezuelan oil.
¹¹ Catherine E. Shoichet and Juan Lopez, "U.S. expels three Venezuelan diplomats," CNN, October 4, 2013, http://www.cnn.com/2013/10/01/politics/venezuela-diplomats-expelled/.

¹² Interviews with Venezuelan scientists, Washington, DC, June 2013.

Venezuela continues to generate tremendous amounts of revenue from its oil. Although Venezuela is a victim of the economic and social woes that characterize the "resource curse," the government nevertheless has the ability to spend massive quantities of money on public works projects and other initiatives. In addition, the Venezuelan government passed a law in 2005 that requires for-profit companies to invest a certain percentage of their income into a national research and development fund.¹³ This science tax has meant that in Venezuela there is no shortage of funding for science; the problem, instead, lies in how these resources are allocated. While official institutions benefit from this windfall, more suspect ones such as the universities do not. This ideologically aligned allocation of funds may account for the contrasting fortunes of the official institutions and the public universities in Venezuela. Furthermore, difficulties in securing funding for research also affect individual scientists, not just institutions. Interviewees expressed the view that having connections within the Ministry of Science, which disburses the government's research funds, are very important, if not absolutely necessary, for securing support for one's research.¹⁴

Yet the challenges that Venezuelan scientists face are myriad and go beyond just whether the government is willing to adequately fund them. Under Chávez, bureaucratic bottlenecks increased, leaving some scientists stymied by the unreasonable amounts of red tape they must wade through in order to move their research agendas forward. Some of these bureaucratic hurdles are ideological but ultimately well-intentioned, and the scientists interviewed by CSIS were less concerned by the essence of the regulations themselves than with rampant problems in their implementation. As part of his promise to better the lot of Venezuela's indigenous populations, protection for indigenous territories increased dramatically under Chávez. These measures, however, have had the unintended consequence of making scientific research in protected areas much more difficult. Scientists complain of the difficulties around securing permits to work in these areas, even though their research would ultimately benefit the affected communities. The severe restrictions have forced some scientists to resort to bribes or sometimes even to simply circumvent official channels.¹⁵ These challenges largely persist under the current administration.

Scientists in Venezuela are also not immune to the ideological strains that have crept into official discourse and the consequences of this politicization of science. The governments of Chávez and Maduro have expected Venezuelan scientists to work not only in support of the country's national goals but also in line with the official ideology of the government. Interviewed scientists complained of the unrealistic and unreasonable expectations placed upon them to pursue "Bolivarian science," whose purpose is to serve socialism and to be utilitarian. Thus, funding for more theoretical or fundamental sciences is subordinated to a considerable degree to support for applied sciences. One interviewee noted that, sometimes, academic journals whose work is deemed inadequately anticapitalistic risk seeing their funding reduced or cut off, even if the content of the journal is apolitical.¹⁶

¹³ Antonio Regalado, "New Law Gives Venezuelan Government Control over Most Research Spending," *Science*, December 24, 2010, http://news.sciencemag.org/2010/12/new-law-gives-venezuelan-government-control-over-most-research-spending.

¹⁴ Interviews with Venezuelan scientists, Washington, DC, June 2013.

¹⁵ Interviews with Venezuelan scientists, Caracas, Venezuela, October 2012, and Washington, DC, June 2013. ¹⁶ Ibid.

Venezuelan scientists without the extensive backing of the government also face the challenges that the currency regime places on the country at large. The government's practice of devaluing Venezuela's currency through its exchange control regime means that the real value of the bolívar differs dramatically from the black market rate. The average Venezuelan lacks access to foreign currency, and the difference between the official and black market rates can make purchasing foreign goods impractical. In the context of science, Venezuelan scientists have difficulty acquiring the equipment and materials they need to conduct their research. This problem encompasses not only physical goods (such as chemicals for experiments), but also intellectual information (including online and physical access to scientific journals).¹⁷

Challenges to science in Venezuela also affect aspiring scientists, namely those students whose education and career prospects are hampered by the political and economic realities of modern-day Venezuela. Despite a long history of cooperation between Venezuelan institutions and foreign ones, such relations have decreased in recent years, particularly with respect to the United States. In comparison to its Brazilian and Chinese counterparts, for instance, the Venezuelan government does not invest as heavily in scholarships for its youth to study at American universities. Anecdotal evidence suggests that of the Venezuelan students and postgraduates who do travel to the United States, many do not return to Venezuela, largely due to a lack of appropriate opportunities in their home country.¹⁸

Scientists in Venezuela must also deal with the reputational challenge that often places their country in a difficult position on the global stage. One interviewee noted that while in the past Venezuela often missed out on international assistance because it was seen as too wealthy, now it suffers from a lack of investment due to its being perceived as a risky environment.¹⁹ Venezuelan scientists stand to gain a great deal professionally and academically from a restored reputation for their country and would therefore like to reestablish Venezuela as a priority country in the global scientific community.

Cooperation around Biodiversity: The Promise of Research and Action on Invasive Species

In late June 2013, CSIS hosted five Venezuelan scientists specializing in biodiversity at its headquarters in Washington, D.C. The purpose of this half-day conference was to convene Venezuelan scientists and their American counterparts, along with U.S. government officials involved with science policy and representatives from major scientific institutions (such as AAAS and the Smithsonian). The scientists were identified from the interviews conducted in Caracas as ideal participants in such a conference, representing a range of institutions and ages. (The project early recognized that scientists in the earlier phases of their careers should be engaged in order to better the prospects for long-term bilateral cooperation around science.)

The conference began with opening remarks by a senior State Department official recognizing the importance of science diplomacy and the tremendous opportunity it offers for building bridges between the United States and Venezuela. Additionally, a

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Interview with Venezuelan scientist, Caracas, Venezuela, October 2012.

former undersecretary of state outlined how science can provide guidance to lead and support foreign policy goals. The speakers noted that because the United States lacks a bilateral agreement around science with Venezuela, such informal meetings pave the way for more formal collaboration down the road.

At this conference, the five Venezuelan scientists had the opportunity to make a formal presentation of their ongoing research activities and to outline their ideas and aspirations for expanded U.S.-Venezuela science-based cooperation. After each presentation, the other conference participants followed with questions and comments, in the process relating how their respective organizations and institutions could potentially link up around concrete topics. Over the course of the moderated discussion, CSIS was able to identify several key areas with the greatest promise for immediate science-based exchange and collaboration.

Invasive Species

Perhaps the most clearly promising path for biodiversity-based science cooperation for Venezuela and the United States is in the area of invasive species. In general, invasive species threaten ecosystems that are often shared by two or more countries, and in the specific case of the United States and Venezuela, the lionfish threatens the native fish populations and coral of the Caribbean and Atlantic coasts. Furthermore, the lionfish represents a problem that is well known to the scientists and governments of all countries in the region, meaning there is great enthusiasm to arrive at a common solution, or at least a common strategy. One particularly interesting aspect of this shared challenge is that it can bring together not only the United States and Venezuela, but also Cuba (as well as a host of other countries). Forming a regional strategy to combat the lionfish invasion therefore represents a rare opportunity for cooperation among the United States, Venezuela, and Cuba, which would have potential for moving the complicated trilateral relationship forward, however modestly.²⁰

Education and Museums

Other opportunities for U.S.-Venezuela cooperation on biodiversity include education and museums. As alluded to earlier, there are currently fewer Venezuelans studying in the United States, proportionally, as there were in past decades. Yet the number of American students in Venezuela is even smaller (fewer than 200 in 2012).²¹ The scientists interviewed as part of this project noted that while in general Venezuelan educational institutions may not present many educational opportunities for American students, biodiversity is an area in which they can offer more.

Having large numbers of the other's students in one's country is a proven way of building trust and lasting relationships between two countries; for instance, the many South Koreans who studied in the United States in the 1960s and 1970s brought home with them not only new skills and ideas but also deep personal connections with

²⁰ Combating the lionfish invasion can also have mutually beneficial commercial solutions for all countries involved, including the possibility of hunting lionfish and selling it on the market as a viable livelihood for coastal fishers. Such a strategy exists locally already to an extent but has yet to be scaled up to the regional level.

²¹ Institute of International Education, "Open Doors Fact Sheet: Venezuela," 2013, http://www.iie.org/~/media/Files/Corporate/Open-Doors/Fact-Sheets-2013/Country/Venezuela-Open-Doors-2013.ashx.

Americans (and American institutions) that have since contributed to the longstanding close alliance between the United States and South Korea.²² The current political situation surrounding the U.S.-Venezuela relationship tempers expectations, but given that building trust is a main goal of science diplomacy, expanding student exchanges between the United States and Venezuela should be an achievable goal.

As for cooperation around museums, interviewees pointed out that it is feasible for museums to build relationships with one another across countries without (significant) government involvement. Venezuela's wealth in the area of biodiversity makes Venezuelan museums particularly suitable potential partners for American institutions. Some formal connections already exist, but there is considerable room—and appetite for expanding such ties.

Cooperation around Seismology

Although CSIS ultimately focused more on biodiversity and did not organize an equivalent Washington conference for seismology, it nevertheless identified a number of areas for bilateral cooperation around seismology. Venezuela has already been integrated to an extent in regional seismological cooperation through the Incorporated Research Institutions for Seismology (IRIS), which is a network of universities in the Americas involved in this area.

Data and Equipment Sharing

Direct bilateral cooperation with U.S. institutions on seismology tends to be around basic rather than applied research. However, interviewees in Venezuela noted that their country would benefit from translating seismological research and data, of which there is plenty, into concrete policy, such as modernizing building codes in Caracas and other cities. There is certainly potential for bilateral data-sharing and best practices to help make the case for better policies informed by sound scientific work.

Scientists in Venezuela noted that the equipment currently being used by USArray (a continental-scale seismic observatory that is a component of the EarthScope experiment) will be available around 2016–2018. At that time, having served its purpose in North America, the equipment could be brought south to fulfill the same purpose in the rest of the Americas, particularly in regions with high seismic activity, including Venezuela. This would be an ambitious and expensive undertaking, but perhaps support could be found from regional organizations such as the Inter-American Development Bank.²³

Seismic Retrofitting

Another way in which American expertise in seismology can benefit Venezuela is through the U.S. experience with seismic retrofitting of schools. Venezuela is currently in great need of such retrofitting. As unfavorable as conditions may be in the capital, project interviewees verified that the situation in the provinces is significantly worse,

²² Daniel Runde and Amasia Zargarian, Strategic Foreign Assistance Transitions: Enhancing U.S. Trade and Cooperation Relations with Middle-Income Countries (Washington, DC: CSIS, June 2012), http://csis.org/files/ publication/120622_Runde_StrategicForeignTransition_Web.pdf. ²³ Interview with Venezuelan seismologists, Caracas, Venezuela, October 2012.

and that schools and universities outside Caracas are particularly underequipped. There are over 1,000 school buildings already identified that need seismic retrofitting, and this challenge is perhaps also an opportunity for U.S.-Venezuela development cooperation on an apolitical objective.²⁴

Recommendations

Limit government involvement at the outset. The governments of both countries must be involved eventually, but it is best to limit official government involvement at this initial stage. Person-to-person and institution-to-institution approaches are the way to proceed for the time being. In particular, institutions with a long and respected history for high-quality scientific work as well as reputation for being apolitical should take the lead. One such institution that fits this description is the Smithsonian, which is held in high esteem in Venezuela.

Share library resources. Even access to digital library resources can be difficult in Venezuela due to the high costs associated with such subscriptions. Offering discount or complimentary access to American digital libraries for Venezuelan researchers (and generally expanding the overall exchange of library resources) could be a modest step forward.

Start small. Modest initiatives and small exchanges should not be seen as inadequate simply because they cannot single-handedly achieve the end goal of a better bilateral relationship. In the case of particularly thorny relationships (including that between the United States and Venezuela), grandiose campaigns with heavy government involvement are more likely to falter. Such large-scale plans fail to give the two governments political cover, and they skip the critical first and middle steps of building ties among scientists themselves.

Listen actively. All scientists wish to be plugged into global networks of peers for scientific and professional purposes. The experience of this initiative showed that scientists themselves already have many concrete ideas for cross-country collaboration. What they often lack, however, is access to the policy channels necessary to facilitate such cooperation. Any policymakers hoping to engage in science diplomacy would do well to actively listen to the very scientists who would participate in exchanges.

In the case of biodiversity, focus on invasive species. Invasive species are a classic example of transnational problems, and in the case of U.S.-Venezuela, the invasive lionfish is a threat to both countries and an opportunity for collaboration. Furthermore, the spread of the lionfish through the Caribbean and Mexican Gulf means that a cooperative approach can take on regional dimensions, including the integration of both Cuba and Venezuela into a regional approach.

Broaden ties among universities and museums. Universities and museums constitute a largely apolitical scientific arena that needs to be explored further in the U.S.-Venezuela context. Universities and museums in both the United States and Venezuela benefit from local expertise and resources that grant them comparative advantages visà-vis their counterparts in other countries. Another advantage of museums and

²⁴ Ibid.

universities is that they possess the institutional capacity for foreign contact and cooperation, since they already regularly engage in such collaboration.

In the case of seismology, share data and equipment. Both countries can benefit from increased hemispheric seismological understanding. Americas-wide efforts already exist, but Venezuela could be better integrated into them. In addition, Venezuela (and other South American countries) can benefit from use of the USArray equipment once its work in North America is complete.

Explore seismic retrofitting. Seismic retrofitting of Venezuelan schools through U.S. technical assistance is just one way to build trust at the governmental and societal levels. Importantly, this is also an apolitical endeavor.

About the Authors

Daniel F. Runde is director of the Project on Prosperity and Development and holds the William A. Schreyer Chair in Global Analysis at CSIS. The Project on Prosperity and Development focuses on private enterprise development, the role of private actors in development (philanthropy, business, diasporas, and others), and the role of "emerging donors" (e.g., members of the G-20). Previously, Mr. Runde was head of the Foundations Unit for the Department of Partnerships and Advisory Service Operations at the International Finance Corporation (IFC), the private-sector arm of the World Bank Group, where he successfully positioned IFC as a partner of choice for private and corporate philanthropy. He was also responsible for leading IFC's relations with senior policymakers throughout the U.S. government. From 2005 to 2007, he was director of the Office of Global Development Alliances (GDA) at the U.S. Agency for International Development (USAID), and he led the GDA partnership initiative by providing training, networks, staff, funds, and advice to establish and strengthen alliances. His efforts leveraged \$4.8 billion through 100 direct alliances and 300 others through training and technical assistance.

Earlier in his career, Mr. Runde worked for both CitiBank and BankBoston in Buenos Aires, Argentina. He started his career with Alex. Brown & Sons, Inc., in Baltimore. He was named in September 2010 as one of "40 under 40 in International Development in Washington" by the Devex Group. He is actively involved in the philanthropic sector as a member of committees for the Global Philanthropy Forum and the Committee Encouraging Corporate Philanthropy. He is a board member of the Society for International Development, the Peter C. Alderman Foundation, the Alliance for the Family, and the Advisory Boards of the UN Development Program's Growing Inclusive Markets Initiative. He has written and spoken extensively on public-private partnership issues at global conferences and symposia. Mr. Runde received an M.P.P from the Kennedy School of Government at Harvard University and a B.A., cum laude, from Dartmouth College.

Amasia Zargarian is a former research associate with the Project on Prosperity and Development at CSIS, where he focused on the transition of the United States' cooperation with middle-income countries beyond foreign assistance. Before joining CSIS, he spent time working in Nagorno-Karabakh and Germany, in addition to completing internships at the American Enterprise Institute and Stanford University. He is a graduate of Stanford University, where he received an M.A. in sociology and a B.A. in international relations and German Studies.

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